

Bandwidth, Latency & Compression

Task 1 [4 Marks]

Bandwidth and latency are two different terms related to the speed of a network. Describe each of these terms below.

Bandwidth is

Latency is

Task 2 [8 Marks]

The bandwidth or latency of a connection can be more important for different uses of the network. In some cases, one is more important than the other, in some they are both equally important. Explain in the table below the importance of bandwidth and latency for each of the examples.

Scenario	Bandwidth	Latency
Online Gaming		
Online Streaming		
Browsing the Web		
VoIP Calls		

Task 3 [4 Marks]

Compression is very important when transmitting files over a network, as it will help to reduce the size of the files, allow the transmission to be completed faster. There are two types of compression we use though, lossy & lossless. **Describe one benefit and one drawback of lossy compression.**

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Task 4 [4 Marks]

Below are several statements about lossless compression. Identify which of these statements are true and which are false.

True

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1. Compressed video and audio files usually use lossless compression.

2. PNG is an example of a lossless compressed image file type.

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3. Archive file formats, such as ZIP files, use lossless compression.

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